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| APPLICATION NO.                                                    | FILING DATE    | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |  |
|--------------------------------------------------------------------|----------------|----------------------|-------------------------|------------------|--|
| 09/963,684 09/27/2001                                              |                | Yoshinori Kano       | 492322002100 9009       |                  |  |
| 25227 7                                                            | 590 11/14/2002 |                      |                         |                  |  |
| MORRISON & FOERSTER LLP<br>2000 PENNSYLVANIA AVE, NW<br>SUITE 5500 |                |                      | EXAMINER                |                  |  |
|                                                                    |                |                      | PRONE, JASON D          |                  |  |
| WASHINGTON, DC 20006-1888                                          |                |                      | ART UNIT                | PAPER NUMBER     |  |
|                                                                    |                | 3724                 |                         |                  |  |
|                                                                    |                |                      | DATE MAILED: 11/14/2002 |                  |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

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Applicant(s)

| Office Action Summary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                    | 09/963,684                         | KANO ET AL.        |     |  |  |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------|--------------------|-----|--|--|--|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                    | Examiner                           | Art Unit           |     |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                    | Jason Prone                        | 3724               |     |  |  |  |
| The MAILING DATE of this c mmunication appears n the c ver sheet with the c rresp ndenc address Period for Reply                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                    |                                    |                    |     |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |                                                                                    |                                    |                    |     |  |  |  |
| Status                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | December 1 to a construction ( ) Shadow 40.0                                       | t t                                |                    |     |  |  |  |
| 1)⊠                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Responsive to communication(s) filed on 12 S                                       | ·                                  |                    |     |  |  |  |
| 2a)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | ,                                                                                  | s action is non-final.             | 4.                 |     |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. <b>Disposition of Claims</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                    |                                    |                    |     |  |  |  |
| ·                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Claim(s) <u>7 and 8</u> is/are pending in the applicati                            | ion.                               |                    |     |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                    |                                    |                    |     |  |  |  |
| 5) Claim(s) is/are allowed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                    |                                    |                    |     |  |  |  |
| 6)⊠ Claim(s) <u>7 and 8</u> is/are rejected.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                    |                                    |                    |     |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Claim(s) is/are objected to.                                                       |                                    |                    |     |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Claim(s) are subject to restriction and/or                                         | election requirement.              |                    |     |  |  |  |
| •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | on Papers                                                                          | •                                  |                    |     |  |  |  |
| 9)🛛 🗆                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | The specification is objected to by the Examiner                                   |                                    |                    |     |  |  |  |
| 10)🛛 🏾                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | The drawing(s) filed on <u>27 September 2001</u> is/a                              | re: a)□ accepted or b)⊠ objected   | to by the Examine  | er. |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Applicant may not request that any objection to the                                | drawing(s) be held in abeyance. Se | ee 37 CFR 1.85(a). |     |  |  |  |
| 11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                    |                                    |                    |     |  |  |  |
| If approved, corrected drawings are required in reply to this Office action.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                    |                                    |                    |     |  |  |  |
| 12) The oath or declaration is objected to by the Examiner.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                    |                                    |                    |     |  |  |  |
| Priority under 35 U.S.C. §§ 119 and 120                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                    |                                    |                    |     |  |  |  |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                    |                                    |                    |     |  |  |  |
| a)⊠ All b)☐ Some * c)☐ None of:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                    |                                    |                    |     |  |  |  |
| 1. Certified copies of the priority documents have been received.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                    |                                    |                    |     |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 2. Certified copies of the priority documents have been received in Application No |                                    |                    |     |  |  |  |
| <ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                    |                                    |                    |     |  |  |  |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                    |                                    |                    |     |  |  |  |
| <ul> <li>a) ☐ The translation of the foreign language provisional application has been received.</li> <li>15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                    |                                    |                    |     |  |  |  |
| Attachment(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                    |                                    |                    |     |  |  |  |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.  4) Interview Summary (PTO-413) Paper No(s).  5) Notice of Informal Patent Application (PTO-152) 6) Other:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                    |                                    |                    |     |  |  |  |

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## **DETAILED ACTION**

#### Election/Restrictions

1. Applicant's election without traverse of claims 7 and 8 in Paper No. 8 is acknowledged.

## **Drawings**

- 2. The drawings are objected to because the drawing lack consistency and do not correspond with the elected claims. In regards to Figures 1 and 2, Figures 1 shows slide bases 12 being well above and not in contact with platen 11, while Figure 2 clearly shows slide bases 12 mounted on platen 11. In regards to Figures 1, 5, 6, and 7, Figures 1 shows slide bases 12 being well above and not in contact with moving member 48, while Figures 5, 6, and 7 clearly show moving members 48 mounted on slide bases 12. In regards to Figures 1 and 2, Figure 1 shows linear motor 14 as a block while Figure 2 portrays the linear motor 14 as a line segment. Also, it is unclear from the drawings, featuring the linear motor, how to determine which part of the linear motor is the moving member 48 and/or the stationary part. The moving member and the stationary part are not given any detail to define their structure.
- 3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: In Figures 1, 2, and 3, item "1". A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

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# Specification

4. The disclosure is objected to under 37 CFR 1.71, as being so incomprehensible as to preclude a reasonable search of the prior art by the examiner. For example, the following items are not understood: It is uncertain how the slide bases transfers the component feeding units. It is unclear how the moving member 48 moves and what function it performs when it is moving. Also, it is unclear how the moving member (48) comes into contact with sliding bases (12), as shown in Figures 5-7, when in Figures 1 and 3 the sliding bases are no where near the moving member (48).

Applicant is required to submit an amendment that clarifies the disclosure so that the examiner may make a proper comparison of the invention with the prior art.

# Claim Rejections - 35 USC § 112

- 5. The following is a quotation of the first paragraph of 35 U.S.C. 112:
  - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 6. Claims 7 and 8 rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

It is not clear how the unit base is capable of carrying a component feeding unit.

The feed unit is understood to be a continuous sheet of tape with components on top. It is not clear how each individual unit base member carries a component feed unit when they are not separated until after the pass through the mounting portion. The functional

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language provided is not supported with any structure shown in the Figures or any structural language explaining the use of the unit base members.

The structure of the linear motor is unclear. From the Figures, the linear motor is a block or a line in some cases, there is no detail shown. In the Specification, there is no description on how the structure of the linear motor incorporates a stationary member and a moving member. It is also uncertain, from the lack of structure, how the moving member is mounted on the unit base. In Figure 1, moving member is below and is separated from the unit base by numerous components and does not appear to touch the unit base in any manner.

It is unclear how the heat dissipation portion is formed on the unit base and how the fin forms a unitary unit with the unit base. In Figure 1, the fin or the heat dissipation portion are not in contact with the unit base.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 7 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

On line 2 of claim 7, it is not clear how the unit base is capable of carrying a component feeding unit. The functional language provided is not supported with any structure shown in the Figures or any structural language explaining the use of the unit base members.

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On lines 4-5 of claim 7, the structure of the linear motor is unclear. The specification and Figures do not describe how the structure of the linear motor incorporates a stationary member and a moving member. It is also uncertain, from the lack of structure, how the moving member is mounted on the unit base. In Figure 1, moving member is below and is separated from the unit base by numerous components and does not appear to touch the unit base in any manner.

On lines 6-7 of claim 7, it is unclear how the heat dissipation portion is formed on the unit base. In Figure 1, the heat dissipation portion is not in contact with the unit base or even near it.

On lines 2-3 of claim 8, it is unclear how the fin forms a unitary unit with the unit base. In Figure 1, the fin is not in contact with the unit base or even near it.

## Claim Rejections - 35 USC § 103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. Claims 7 and 8 are rejected, as best understood, under 35 U.S.C. 103(a) as being unpatentable over 61-239696 (Japan Patent). 61-239696 discloses the invention including at least one unit base (15a) capable of carrying at least one unit (Lines 10-11), a platen (11) for sliding the unit base (Fig. 1), a linear motor (18) comprising at least one stationary member mounted on the platen (Fig. 1) and a moving member mounted on the unit base (3) but fails to disclose a dissipation portion comprising a heat dissipation

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fin. The Ando et al. patent teaches the use of a dissipation portion comprising a heat

dissipation fin (Column 4 lines 62-67). Therefore, it would have been obvious to one

skilled in the art, at the time of the invention, to have provided 61-239696 with a heat

dissipation portion to control the heat level during operation.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure. Heller et al., Galli, Storimans ('457), Richards et al., Sticht,

Storimans ('263), Mohara et al., Dowell et al., Kano et al. ('977), Kano et al. ('411),

Kano, and Kano et al. ('707).

11. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jason Prone whose telephone number is 703-605-4287.

The examiner can normally be reached on 7:30-5:00, Mon - (every other) Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Allen N. Shoap can be reached on 703-308-1082. In lieu of mailing, it is

encouraged that all formal responses be faxed to 703-872-9302.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is 703-308-

1148.

Allan N Shoap

Supervisory Patent Examiner

Group 3700

JP

November 8, 2002